

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## CLAIM AMENDMENTS

Please cancel claims 20, 22-23, 25, 29 and 32 without prejudice or disclaimer.

Please amend the claims as follows:

1. (Original) Seed of corn inbred line designated LH322, representative seed of said line having been deposited under ATCC Accession No. \_\_\_\_\_.
2. (Original) A corn plant, or parts thereof, produced by growing the seed of claim 1.
3. (Original) Pollen of the plant of claim 2.
4. (Original) An ovule of the plant of claim 2.
5. (Original) A corn plant, or parts thereof, having all of the physiological and morphological characteristics of the corn plant of claim 2.
6. (Currently Amended) The corn plant of claim 2, wherein said plant is further defined as comprising a gene conferring male-sterile sterility.
7. (Original) A tissue culture of regenerable cells from the corn plant of claim 2.
8. (Currently Amended) [[A]] The tissue culture according to claim 7, the cells or protoplasts of the tissue culture ~~being from~~ having been isolated from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
9. (Currently Amended) A corn plant regenerated from the tissue culture of claim 7, wherein the regenerated plant ~~is capable of expressing~~ expresses all the morphological and physiological characteristics of inbred line LH322.
10. (Currently Amended) A corn plant with all of the physiological and morphological characteristics of corn inbred LH322, ~~wherein said corn plant is produced by a tissue culture process using the corn plant of claim 5 as the starting material for such a process~~.

11. (Original) A method for producing a hybrid corn seed comprising crossing a first inbred parent corn plant with a second inbred parent corn plant and harvesting the resultant hybrid corn seed, wherein said first inbred parent corn plant or second said parent corn plant is the corn plant of claim 2.
12. (Original) A hybrid corn seed produced by the method of claim 11.
13. (Original) A hybrid corn plant, or parts thereof, produced by growing said hybrid corn seed of claim 12.
14. (Original) A corn seed produced by growing said corn plant of claim 13 and harvesting the resultant corn seed.
15. (Original) An F<sub>1</sub> hybrid seed produced by crossing the inbred corn plant according to claim 2 with another, different corn plant.
16. (Original) A hybrid corn plant, or its parts, produced by growing said hybrid corn seed of claim 15.
17. (Currently Amended) A method for producing inbred LH322 seed, representative seed of which have been deposited under ATCC Accession No. \_\_\_\_\_, comprising:
  - a) planting a collection of seed comprising seed of a hybrid, one of whose parents is inbred LH322, said collection also comprising seed of said inbred;
  - b) growing plants from said collection of seed;
  - c) identifying inbred parent plants;
  - d) controlling pollination in a manner which preserves the homozygosity of said inbred parent plant; and
  - e) harvesting the resultant seed.
18. (Currently Amended) The process of claim 17 wherein step (c) further comprises identifying plants with decreased vigor.
19. (Original) A method for producing a LH322-derived corn plant, comprising:

- a) crossing inbred corn line LH322, representative seed of said line having been deposited under ATCC accession number \_\_\_\_\_, with a second corn plant to yield progeny corn seed; and
- b) growing said progeny corn seed, under plant growth conditions, to yield said LH322-derived corn plant.

20. (Canceled)

21. (Original) The method of claim 19, further comprising:

- c) crossing said LH322-derived corn plant with itself or another corn plant to yield additional LH322-derived progeny corn seed;
- d) growing said progeny corn seed of step (c) under plant growth conditions, to yield additional LH322-derived corn plants; and
- e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further LH322-derived corn plants.

22-23. (Canceled)

24. (Original) The method of claim 19, still further comprising utilizing plant tissue culture methods to derive progeny of said LH322-derived corn plant.

25. (Canceled)

26. (Original) The corn plant, or parts thereof, of claim 2, wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.

27. (Currently Amended) A method for producing a corn plant that contains in its genetic material one or more transgenes, comprising crossing the corn plant of claim 26 with either a second plant of another corn line, or a non-transformed corn plant of the line LH322, wherein progeny are produced, so that the genetic material of the progeny that result from the cross contains the transgene(s) operably linked to a regulatory element.

28. (Currently Amended) A corn plant-~~Corn~~ plants, or parts thereof, produced by the method of claim 27.
29. (Canceled)
30. (Currently Amended) A method for developing a corn plant in a corn plant breeding program using plant breeding techniques which include comprising employing a corn plant, or its parts, as a source of plant breeding material comprising: using the corn plant, or its parts, of claim 2 as a source of said breeding material.
31. (Currently Amended) The method for developing a corn plant in a corn plant breeding program of claim 30 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.
32. (Canceled)

## **RESPONSE TO OFFICE ACTION**

### **A. Status of the Claims**

Claims 1-32 were filed with the original application. Claims 20, 22-23, 25, 29 and 32 have been canceled without prejudice or disclaimer. Claims 6, 8-10, 17-18, 27-28 and 30-31 have been amended herein. Claims 1-19, 21, 24, 26-28 and 30-31 are now pending and presented for reconsideration.

### **B. Claim Objections**

The Action objects to claims 8 and 28 based on informalities. In response, it is noted that the claims have been amended to correct the respective clerical errors. The amendments do not narrow the claims and, accordingly, Applicants do not intend to disclaim any subject matter through the amendments. The objections should now be moot.

### **C. Objection to the Specification**

The specification has been objected to based on the lack of information regarding the deposit of seed of inbred LH322. In response, Applicants note that the specification will be amended to insert the seed deposit information upon an indication that the claims are otherwise allowable.

### **D. Rejection of Claims Under 35 U.S.C. §112, Second Paragraph**

The Action rejects the claims under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out the subject matter which Applicants regard as the

invention. Applicants responses to the rejections are set forth below in the order they appear in the Action:

(1) Rejection of claim 6:

Applicants note that claim 6 has been amended to specify that the plant is “further defined as comprising a gene conferring male sterility.” This comprises an element that is added to that of the main claim. Specifically, the claim includes all of the limitations of the main claim but adds a further characteristic. The claim is thus fully definite and in proper dependent format.

The amendment does not narrow the claims and, accordingly, Applicants do not intend to disclaim any subject matter through the amendment. It is believed that the rejection is now moot in light of the amendment.

(2) Rejection of claim 9:

Applicants traverse the rejection but note that the claim has been amended to replace “is capable of expressing” with “expresses.” It is believed that the rejection is now moot in light of the amendment.

(3) Rejection of claim 10:

Applicants note that the claim has been amended and it is believed that the rejection is moot in light of the amendment. The amendment does not narrow the claims and, accordingly, Applicants do not intend to disclaim any subject matter through the amendment. Removal of the rejection is thus requested in light of the amendment.

(4) Rejection of claims 9 and 10:

The Action stated that “corn inbred LH322” renders the claims indefinite because it is not an art known designation. In response, it is noted that the term is fully definite in view of the

description in the specification and proffered deposit of seed and recitation of an ATCC accession number in claim 1. Removal of the rejection is thus respectfully requested.

(5) Rejection of claims 20, 23, 25 and 29:

Applicants respectfully traverse the rejection but note that, in the interest of compact prosecution of the case, the subject claims have been cancelled without prejudice or disclaimer. The rejection is thus now moot.

(6) Rejection of claim 24:

Applicants respectfully traverse the rejection. The claim is fully definite based on the positive steps that are set forth in the claim, namely the use of plant tissue culture methods to derive progeny. As the claim refers to deriving progeny of “said LH322-derived corn plant,” which is the result of the last step in claim 19, there is no indefiniteness as to when the tissue culture methods are used. The methods could only be used after step (b) is completed, since it is only after this step that there is a “LH322-derived corn plant” in accordance with claim 19. “Utilizing” plant tissue culture is further not indefinite because the claim recites the positive step of utilizing plant tissue culture methods *to derive progeny*. This is not narrative. Utilizing plant tissue culture methods to derive progeny denotes a positive action and the limitation to plant tissue culture methods fully defines what this positive action is. The cited claim term must be viewed in light of the claim as a whole, including the claim from which it depends and all the limitations recited within the claim. When this is done, it is readily apparent that the metes and bounds of the claim are fully defined in compliance with the second paragraph of 35 U.S.C. § 112. Removal of the rejection is thus respectfully requested

(7) Rejection of claim 30:

Applicants respectfully traverse the rejection. “Using the corn plant” of claim 2 as recited in claim 30 is not indefinite. Claim 30 specifies a method for developing a corn plant in a corn plant breeding program using plant breeding techniques comprising employing the corn plant of claim 2, or its parts, as a source of plant breeding material. The claim thus recites the positive step of using the corn plant of claim 2, or its parts, as a source of breeding material in a corn plant breeding program using plant breeding techniques. Use of a plant as a source of breeding material in a corn plant breeding program is a well known process in the art that forms the basis of how new corn inbreds are made. This is set forth at pages 2-4 of the specification. Such a positive limitation is readily understood by one of skill in the art. The second paragraph of 35 U.S.C. §112 merely requires that it be clear to those skilled in the art what Applicant intends to claim. What is dispositive is whether one of ordinary skill in the art would understand what is claimed when the claims are read in light of the specification. The claim cannot therefore be considered indefinite for failure to recite a positive step with known metes and bounds. Removal of the rejection is thus respectfully requested.

(8) Rejection of claim 31:

The Action states that “restriction fragment length polymorphism enhanced selection,” and “transformation” do not further define using a corn plant as a source of breeding material. Applicants respectfully traverse, as the recited techniques are among the many known plant breeding processes. What was not known is corn variety LH322, and thus the ability to use this variety in such known breeding processes. Reciting these techniques further defines the method of main claim 30. As the recited techniques are known to those of skill in the art and further

defines the scope of the claim, and no basis has been provided to conclude otherwise, the recited terms are fully definite. Removal of the rejection is thus respectfully requested.

(9) Rejection of claim 32:

Applicants respectfully traverse the rejection but note that, in the interest of compact prosecution of the case, the subject claims have been cancelled without prejudice or disclaimer. The rejection is thus now moot.

In view of the foregoing, Applicants respectfully request the removal of the rejections under 35 U.S.C. §112, second paragraph.

**E. Rejection of Claims Under 35 U.S.C. §112, First Paragraph – Written Description**

The Action rejects claims 6, 12-18 and 20-32 under 35 U.S.C. §112, first paragraph, for allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Applicants respectfully traverse the rejection.

With respect to claims 20, 22-23, 25 and 32, it is first noted that the claims have been canceled without prejudice or disclaimer and thus the rejection of these claims is now moot. With respect to the remaining claims, the claimed subject matter has been described in full compliance with the first paragraph of 35 U.S.C. §112, first paragraph. In particular, the specification provides a description of sufficient structural characteristics of hybrid plants having inbred corn plant LH322 as one parent to satisfy the written description requirement. For example, the specification describes, in Tables 1-4, four hybrids that were produced using LH322 as one parent. Described in the tables are the mean yield, percentage moisture, stalk lodging, root lodging, percent of dropped ears, plant height and ear height for these hybrids. This

information, combined with the descriptions of the genetic and morphological characteristics of LH322 in the specification, is more than adequate to provide a description of hybrid plants and seeds derived from corn plant LH322 in compliance with the written description requirement. While the claims are directed to a genus of plants, these three hybrids constitute a representative set of species describing the genus based on the shared structural characteristics of the members of the genus.

Because corn plant LH322 is an inbred corn plant, all hybrid plants having LH322 as a parent will contain the same genetic contribution from LH322 and thus will be genetically distinct and identifiable from any other corn plant on this basis. That is, because LH322 is an inbred corn plant, all hybrid corn plants derived therefrom must inherit exactly half of the genetic material of corn plant LH322. All hybrid plant derived from LH322 will thus be genetically identical with respect to this genetic contribution. The Federal Circuit has noted that such shared structural features possessed by members of a genus is important to the written description requirement. *The Regents of The University of California v. Eli Lilly and Co.*, 119 F.3d 1559, 1568; 43 USPQ2d 1398, 1406 (Fed. Cir. 1997) (noting that a name alone does not satisfy the written description requirement where “it does not define any structural features commonly possessed by members of the genus that distinguish them from others. One skilled in the art therefore cannot, *as one can do with a fully described genus, visualize or recognize the identity of the members of the genus*” (emphasis added)). Here, all of the members of the claimed genus of hybrids having LH322 as one parent share the structural feature of having the genetic complement of LH322. One of skill in the art could thus readily identify the members of the genus. The written description requirement has therefore been fully complied with.

The Action also rejects claims to corn plant LH322 which has been transformed with one or more transgenes. However, such plants are fully described by way of the description of corn plant LH322 and representative transgene species, including the accompanying phenotypic effect of the transgenes. Examples of just some of the transgenes and the associated phenotypic traits described in the specification include the following: genes that confer resistance to herbicides or antibiotics such as (a) a neomycin phosphotransferase II (nptII) gene, isolated from transposon Tn5, conferring resistance to kanamycin, (b) a hygromycin phosphotransferase gene conferring resistance to the antibiotic hygromycin, (c) streptomycin phosphotransferase, gentamycin acetyl transferase and aminoglycoside-3'-adenyl transferase, conferring resistance to antibiotics; screenable marker genes including, (a)  $\beta$ -glucuronidase, (b) luciferase, (c) chloramphenicol acetyltransferase, and (d) Green Fluorescent Protein (GFP); genes that confer resistance to pests or disease including (a) the tomato Cf-9 gene for resistance to *Cladosporium fulvum*, (b) the tomato Pto gene for resistance to *Pseudomonas syringae* pv., (c) an *Arabidopsis* RSP2 gene for resistance to *Pseudomonas syringae*, (d) a *Bacillus thuringiensis* insecticidal protein gene, (e) a vitamin-binding protein such as avidin, (f) an enzyme inhibitor, for example, a protease or proteinase inhibitor or an amylase inhibitor, and (g) an insect-specific hormone or pheromone such as an ecdysteroid and juvenile hormone; a mutant 5-enolpyruvl-3-phosphikimate synthase (EPSP) or aroA gene conferring resistance to glyphosate; antisense stearyl-ACP desaturase to increase stearic acid content of the plant; a phytase-encoding gene enhancing breakdown of phytate, adding more free phosphate to the transformed plant; and a gene coding for an enzyme that alters the branching pattern of starch such as an  $\alpha$ -amylase or tomato invertase gene.

The foregoing examples constitute a representative set of species supporting a description of the genus of transformed LH322 plants. To conclude otherwise would limit Applicants to that subject matter described *ipsis verbis* in the specification. This position is expressly contradictory to Federal Circuit precedent. *In re Gosteli*, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (stating that the written description requirement does not require an applicant to "describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed" (citations omitted)). While Applicants have not described every possible single species of transgenes introduced into LH322, this is not required to provide a written description of a genus. *In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994). As such, Applicants have fully complied with the written description and removal of the rejection under 35 U.S.C. §112, first paragraph, is thus respectfully requested.

**F. Rejection of Claims Under 35 U.S.C. §112, First Paragraph – Enablement**

(1) The Action rejects claims 1-32 under 35 U.S.C. §112, first paragraph, for lack of enablement based on the need for a deposit of seed of corn variety LH322.

In response, Applicants note that a deposit of 2,500 seeds of the inbred LH322 will be made with the ATCC upon the allowance of the case. The deposit will be made in accordance with the terms and provisions of 37 C.F.R. §1.801-1.809 relating to deposits of microorganisms. The deposit will be made for a term of at least thirty years or at least five years after the most recent request for furnishing of a sample of the deposit is received by the depository or for the effective life of the patent, whichever is longer. A declaration certifying that the deposit meets

the criteria set forth in 37 C.F.R. §1.801-1.809 will be provided and the claims will be amended to recite the accession number for the deposit.

In light of the foregoing, Applicant respectfully requests that the rejection be withdrawn.

(2) The Action rejects claims 6, 12-18 and 20-32 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. In particular, the Action alleges that the specification does not enable male sterile plants of corn variety LH322, corn plants of corn variety LH322 comprising a transgene and methods of breeding corn variety LH322. Applicants respectfully traverse.

It is first noted that all that is required to satisfy the enablement requirement of 35 U.S.C. §112, first paragraph, is that Applicants teach one reasonably skilled in the art how to make and use the claimed invention without undue experimentation. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). The specification has done this and thus fully meets the requirement.

With regard to creation of male sterile plants, this is a technique that has been *well-known for decades*, many years even before genetic transformation was known. This is evidenced by the numerous issued patents for creation of male sterile plants (see U.S. Patent No. 3,861,709; U.S. Patent No. 3,710,511; U.S. Patent No. 4,654,465; U.S. Patent No 5,625,132; U.S. Patent No. 4,727,219; U.S. Patent No. 5,530,191; U.S. Patent No. 5,689,041; U.S. Patent No. 5,741,684; and U.S. Patent No. 5,684,242). No reasonable basis has been provided as to why these well known techniques cannot be applied in the context of corn line LH322.

The only basis alleged by the Action for the rejection is several references said to show the difficulty of making male sterile or transgenic plants. However, these references have not

been shown to have any relevance to *corn* plants beyond the mere opinion. Hunsperger deals with petunias; Kraft with sugar beets and Eshed with Tomatoes. The relevance of the references to the claimed invention has therefore not been established, as is specifically required to demonstrate a *prima facie* case of non-enablement.

The Action has also alleged that hybrid plants, seeds or parts thereof in claims 12-16 are not enabled. However, the Action has already acknowledged that the method of making a hybrid plant in claim 11 is enabled. Claim 12 is directed the seed of claim 11. The rejection must therefore fail on its face – if the method of producing seed in claim 11 is enabled so is the seed produced by that method. Further, the specification describes *working examples* showing the production of *four hybrid plants*. No reason has been presented to conclude why this does not show enablement of the claims.

Claim 13 is directed to a plant produced by growing the seed of claim 12. As all that is required for this claim is mere germination of the seed in claim 12, this claim is also enabled. Claim 14 is directed to a seed produced by the plant of claim 13, which is inherently produced by growing the plant and is therefore also enabled.

Claim 15 is directed to an F1 hybrid plant produced by crossing the plant of claim 2 to *any* second plant. The plant of claim 2 has not been rejected and thus has been acknowledged to be enabled. All that the claim therefore requires is cross-pollinating the plant of claim 2 with any second plant. Once again, there is no basis to conclude why one of skill in the art could not do this, the most basic plant breeding step, particularly in light of the allowance of claim 11. Claim 16 is directed to a corn plant made by growing seed of claim 15, which again only requires germination of the seed and is enabled by claim 15.

Claims 17-18 concern a method for producing inbred LH322 seed comprising following the recited steps. Again, all that is required to complete the method is to follow the steps given in the claim, which themselves are known in the art and described in the specification. What was not known was the point of novelty, corn plant LH322, which has already been acknowledged to be enabled as set forth above. As such, the Action has failed to provide any basis to doubt the enablement of the claims.

Claims 21, 24, 27 and 30-31 are all method claims that involve breeding corn plant corn plant LH322 according to the recited methods. Once again, all that is required to complete the method is to follow the steps given in the claim, which themselves are standard in the art. The only necessary starting material is corn plant LH322, which has already been acknowledged to be enabled as set forth above. While some of the steps involve use of a second corn plant, *any* different second corn plant can be used. What other plant or plants one chooses to cross with the claimed variety is therefore *completely irrelevant to enablement*, as any fertile corn plant could be used to produce an inbred corn plant derived from the corn line LH322. Enablement only requires that one of skill in the art be able to make and use the *claimed invention* without undue experimentation. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). This has fully been done and no basis has been provided to conclude otherwise.

Again, with regard to claimed methods of corn breeding comprising use of LH322, corn breeding is also an extremely advanced and well known art. This is due in large part to the fact that corn is one of the world's major food crops and largest seed crops. North American farmers alone plant *tens of millions of acres* of corn at the present time and there are *extensive national and international commercial corn breeding* programs. Given this, there is no basis for the instant rejection.

Claim 26 is directed to corn plant LH322 or parts thereof “wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.” The Action appears to reject this and the other claims as allegedly failing to adequately describe the corn plant having been transformed so that its genetic material contains one or more transgenes. However, this allegation is not understood. As set forth above, Applicants must only teach one of skill in the art to make and use the invention. Applicants have more than adequately done so. For example, the specification provides corn line LH322, which will be deposited upon the indication of otherwise allowable subject matter. The specification also describes numerous plant transformation techniques that are known in the art, such as *Agrobacterium*-mediated transformation; microprojectile-mediated transformation; sonication of target cells; liposome or spheroplast fusion; electroporation of protoplasts and whole cells and tissues; and direct uptake of DNA into protoplasts using CaCl<sub>2</sub> precipitation, polyvinyl alcohol or poly-L-ornithine.

The specification further describes numerous coding and regulatory sequences for transformation into corn plant LH322 using the transformation techniques described including numerous examples of plant disease resistance genes, *Bacillus thuringiensis* protein genes, genes that confer resistance to a herbicide; genes that confer or contribute to a value-added trait, inducible promoters, constitutive promoters, tissue-specific promoters, and signal sequences for targeting proteins to subcellular compartments. This teaching is more than adequate to teach one of skill in the art to introduce one or more transgenes into corn variety LH322.

In view of the foregoing Applicants respectfully request the removal of the rejection

**G. Rejection of Claims Under 35 U.S.C. §102(b)/103(a)**

(1) The Action has rejected claims 12-16, 20, 22, 23, 25, 29 and 32 under 35 U.S.C. §102(b)/103(a) as allegedly anticipated or, in the alternative, obvious over Miller (U.S. Patent 5,545,811). Applicant respectfully traverses.

The rejection is made based on the allegation that, depending upon what second corn plant one of skill in the art selected, the resulting corn seed and progeny *could be* genetically, morphologically and physiological indistinguishable from that of the instant claims. However, what *could* happen is irrelevant. Under 35 U.S.C. § 102(b) it is the burden of the Office to show that each and every element as set forth in the claim is found in the prior art. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). This has not been done and the rejection must therefore fail.

To the extent that alleged unexpressed inherent characteristics form the basis of an anticipation rejection, it is noted by Applicants that these characteristics must necessarily flow from the disclosure. *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991) ("To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."). Here, all that is stated in the Action is that, under a hypothetical set of circumstances, the claims allegedly could be anticipated. However, the Action not only does not indicate that these circumstances ever *have* occurred prior to the filing of the application,

there is not even a showing that such circumstances *could* occur, e.g., that a set of corn plants exist in the prior art that could be crossed to arrive at the claimed invention. The Action has thus clearly failed to meet the burden under 35 U.S.C. §102(b).

Similarly, in order to establish a *prima facie* case of obviousness under 35 U.S.C. §103, three criteria must be met: (1) there must be some motivation or suggestion in the cited prior art or in the knowledge generally available to one of skill in the art to combine the teachings to arrive at the invention, (2) there must be a reasonable expectation of success, and (3) the prior art must teach or suggest all claim limitations. *See In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991), *see also*, M.P.E.P. § 2142. All three of these criteria are missing in the instant rejection. First, there is no motivation or suggestion in the prior art to arrive at the invention and no rationale for such a motivation has been alleged in the Action. The rejection thus relies on an “obvious to try” type rationale. This approach has been rejected by the Federal Circuit. *See In re O’Farrell*, 853 F.2d 894, 903. Second, one of skill in the art would have no reasonable expectation of success in selecting a second inbred corn plant to arrive at the invention. For example, there is no indication or showing in the Action that a second corn plant that could be used to produce progeny within the scope of the claims even exists, let alone the motivation for one of skill in the art to cross this plant with LH322. Finally, the Action has not shown that the prior art teaches or suggests all of the claim limitations. Without such a teaching of all of the claim limitations, one of skill in the art would lack the guidance necessary to arrive at the invention.

In view of the foregoing Applicant respectfully requests removal of the rejection.

(2) The Action has rejected claim 28 under 35 U.S.C. §103(a) as allegedly obvious over Miller in view of Lundquist *et al.* (U.S. Patent 5,508,468). Applicants respectfully traverse.

The rejection appears to be made based on the allegation that, depending upon what second corn plant one of skill in the art selected, the resulting corn seed and progeny *could be* genetically, morphologically and physiological indistinguishable from that of the instant claims. However, what *could* happen is irrelevant. In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103, three criteria must be met: (1) there must be some motivation or suggestion in the cited prior art or in the knowledge generally available to one of skill in the art to combine the teachings to arrive at the invention, (2) there must be a reasonable expectation of success, and (3) the prior art must teach or suggest all claim limitations. *See In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991), *see also*, M.P.E.P. § 2142. All three of these criteria are missing in the instant rejection. First, there is no motivation or suggestion in the prior art to arrive at the invention and no rationale for such a motivation has been alleged in the Action. The rejection thus relies on an “obvious to try” type rationale. This approach has been rejected by the Federal Circuit. *See In re O’Farrell*, 853 F.2d 894, 903. Second, one of skill in the art would have no reasonable expectation of success in selecting a second inbred corn plant to arrive at the invention. For example, there is no indication or showing in the Action that a second corn plant that could be used to produce progeny within the scope of the claims even exists, let alone the motivation for one of skill in the art to cross this plant with LH322. Finally, the Action has not shown that the prior art teaches or suggests all of the claim limitations. Without such a teaching of all of the claim limitations, one of skill in the art would lack the guidance necessary to arrive at the invention.

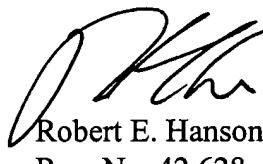
In view of the foregoing Applicant respectfully requests removal of the rejection.

**H. Conclusion**

This is submitted to be a complete response to the referenced Office Action. In conclusion, Applicant submits that, in light of the foregoing remarks, the present case is in condition for allowance and such favorable action is respectfully requested.

The Examiner is invited to contact the undersigned at (512)536-3085 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



Robert E. Hanson  
Reg. No. 42,628  
Attorney for Applicant

FULBRIGHT & JAWORSKI, L.L.P.  
600 Congress Ave., Ste. 1900  
Austin, Texas 78701  
(512) 474-5201

Date: January 21, 2004